

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	· FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,108 09/04/2001		Troy J. Liebl	114293-1622	1735
30734 7	7590 01/27/2004	EXAMINER		
	OSTETLER LLP	GOOD JOHNSON, MOTILEWA		
	ON SQUARE, SUITE 1100 CTICUT AVE. N.W.	ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20036-5304	2672	7	
			DATE MAILED: 01/27/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Applicatio	n No.	Applicant(s)				
Office Action Summary		09/944,10	8	LIEBL ET AL.					
		Examiner		Art Unit					
	The BRAILING DATE of this commu	unication can		. Good-Johnson	2672	dross			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE I - Externanter - If the - If NC - Failu - Any r	ORTENED STATUTORY PERIOD MAILING DATE OF THIS COMMUN nsions of time may be available under the provisior SIX (6) MONTHS from the mailing date of this comperiod for reply specified above is less than thirty period for reply is specified above, the maximum are to reply within the set or extended period for reply received by the Office later than three months ad patent term adjustment. See 37 CFR 1.704(b).	NICATION.  ns of 37 CFR 1.136  nmunication.  (30) days, a reply obtained will  ly will, by statute, of	6(a). In no eve within the statu ill apply and will cause the appli	nt, however, may a reply be tim tory minimum of thirty (30) days expire SIX (6) MONTHS from cation to become ABANDONEI	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).				
1)⊠	Responsive to communication(s) file	led on <u>29 Au</u>	gust 2003.						
2a)⊠	This action is <b>FINAL</b> .	2b)∏ This a	action is no	n-final.					
3)[	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
<ul> <li>4) Claim(s) 1 and 3-22 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) is/are rejected.</li> <li>7) Claim(s) 1 and 3-22 is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>									
	on Papers								
9)	9) The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. §§ 119 and 120									
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>									
Attachmen	t(s)			_					
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review ( mation Disclosure Statement(s) (PTO-1449)		·		(PTO-413) Paper No( atent Application (PT0				



Art Unit: 2672

#### DETAILED ACTION

1. This office action is responsive to the following communications: Application, filed 09/04/2001; IDS, paper #3, filed 12/10/2001; Preliminary Amendment A, filed 12/10/2001; Amendment B, filed 08/29/2003.

### This action is made final.

- 2. Claims 1 and 3-20 are pending in this application. Claims 1, 12 and 17 are independent claims. Claims 1, 3, 12, 17 and 18 have been amended. Claims 21 and 22 have been added. Claim 2 has been canceled.
- 3. The present title of this application is "Data Monitoring and Display Method and Apparatus" (as originally filed).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1 and 3-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurne et al., U.S. Patent Number 6,181,992 B1, "Automotive Diagnostic Service Tool with Hand Held Tool and Master Controller", class 701/29.

As per independent claim 1, a method of displaying automotive service data on a diagnostic tool, comprising the steps of: displaying a list of performance

Art Unit: 2672

measurements, descriptions and values; (Gurne discloses a menu display providing options and function keys, col. 6, lines 34-40, see also figure 6) scrolling through said list of measurement descriptions and values; (Gurne discloses direction arrow keys to scroll the menu, col. 7, lines 9-10) selecting a measurement from said list; (Gurne discloses a system selection screen to select the vehicle diagnosis option, col. 7, lines 19-26) and displaying a graphical representation of said selected measurement over time. (Gurne discloses displaying graphical information dynamically, see figure 12, col. 16, lines 24-35)

However, it is noted that Gurne fails to disclose arranging the order in which said measurement description and values are displayed.

Gurne discloses visually describing what steps are to be taken and in what order and the units are designed to user forms of routines and each routine can be thought of as a series of steps, col. 15, lines 28-36.

It would have been obvious to one of ordinary skill in the art at the time of the invention to arrange the order of the measurement and values to allow a technician to perform the required action based upon the form of routine steps.

With respect to dependent claim 3, selecting the font for at least one entry in said list of performance measurements. (Gurne discloses allowing a user to define customized templates by selecting parameters a user wishes to display by entering characters to identify the template, col. 10, lines 39-67)

Art Unit: 2672

With respect to dependent claim 4, selected font differentiates said entry from the other entries in said list. (Gurne discloses highlighting an item containing characters, to indicate selection of a desired item, col. 7, lines 1-18)

With respect to dependent claim 5, selected font is a different color from the other entries in said list. (Gurne discloses highlighting an item containing characters to select a desired item, col. 7, lines 1-18. It is inherent that highlighting is used to differentiate between characters.)

With respect to dependent claim 6, selecting the performance measurement to be displayed in said list from a group of available measurements. (Gurne discloses a list of selected measurements, figure 6)

With respect to dependent claim 7, receiving said performance measurement values from a vehicle onboard computer. (Gurne discloses using the hand held tool to receive communication information, i.e. measurement values, from vehicle controller systems, col. 5, lines 22-27)

With respect to dependent claim 8, varying the time axis of the graphical representation of said selected measurement over a portion of said measurement before displaying said graphical representation. (Gurne discloses display data graphs and templates that define which variables will be displayed as charts or text, col. 16, lines 35-39)

With respect to dependent claim 9, varying step includes expanding the time axis over a discreet portion of said axis. (Gurne discloses the hand held unit as a data logger and allow the user to select vehicle parameters on a real time basis and further

Art Unit: 2672

discloses the logging information represents a snapshot or window of information of which the user can freeze in time as well as the parameters around the time of the trigger, col. 11, lines 10-54)

With respect to dependent claim 10, performance measurements are engine performance measurements. (Gurne discloses using the tool in vehicle controller systems such as the engine, col. 6, lines 25-27)

With respect to dependent claim 11, moving selected performance measurement descriptions and values to the top of said list to arrange the order in which the entries are listed. (Gurne discloses allowing a user to enter the customization mode and select from a list of parameters, i.e. performance measurements, that the user wishes to display, col. 10, lines 39-47)

As per independent claim 12, apparatus for displaying automotive service data, comprising: a display screen; (Gurne discloses a display screen, figure 2, element 20) a pair of switches that receive input directing data to scroll up and down on said display screen; (Gurne discloses a toggle up and down button, figure 5, element 68) a selection switch for selecting a data item displayed on said display screen; (Gurne discloses a switch, figure 5, element 70) a graphics program for generating a graphical representation to be displayed on said display screen of said selected data item; (Gurne discloses based upon the user selection the hand held is in a programming mode, col. 10, lines 20-25) and wherein said selected data item is an engine performance measurement. (Gurne discloses using the tool in vehicle controller systems such as the engine, col. 6, lines 25-27)



Art Unit: 2672

However, it is noted that Gurne fails to disclose a first graphical representation and a second graphical representation by varying a time axis of the first graphical representation and displaying both simultaneously.

Gurne discloses a split window, with a digital multi mode and a suspended operation and allowing the technician to toggle between the operations and further allow the technician to perform different types of reading simultaneously, col. 8, lines 4-44.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include displaying a first and second graphical representation simultaneously because Gurne allows for different types of reading simultaneously and the technician may desire to view the time frame for a different procedure.

With respect to dependent claim 13, pair of switches and selection switch share a single input button on said apparatus. (Gurne discloses functions keys to perform screen toggle and further discloses the function keys may be configurable through software, col. 6, lines 40-47)

With respect to dependent claim 14, display screen is a touch screen.

However, it is noted that Gurne fails to disclose a touch screen.

Gurne discloses providing function keys and function key describer in the form of an icon.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the display screen of Gurne as a touch screen, because it is well known in the art that the selection of an icon is performed by input means, which may include touch.

Art Unit: 2672

With respect to dependent claim 15, display screen is an LCD screen. (Gurne discloses a LCD display screen, col. 4, lines 1-3)

With respect to dependent claim 16, graphics program can vary the length of the time axis driving different intervals of the performance measurement. (Gurne discloses the hand held unit as a data logger and allow the user to select vehicle parameters on a real time basis and further discloses the logging information represents a snapshot or window of information of which the user can freeze in time as well as the parameters around the time of the trigger, col. 11, lines 10-54)

As per independent claim 17, apparatus for display automotive service data, comprising: display means for displaying a list of engine performance descriptions and measurements; (Gurne discloses a display menu, figure 6) selection means for selecting at least one of said engine performance measurements to be displayed in a graphical representation; (Gurne discloses a system selection screen to select the vehicle diagnosis option, col. 7, lines 19-26) wherein said graphical representation is displayed in the list of engine performance descriptions and measurements. (Gurne discloses using the tool in vehicle controller systems such as the engine, col. 6, lines 25-27)

However, it is noted that Gurne fails to disclose a first graphical representation and a second graphical representation by varying a time axis of the first graphical representation and displaying both simultaneously.

Art Unit: 2672

Gurne discloses a split window, with a digital multi mode and a suspended operation and allowing the technician to toggle between the operations and further allow the technician to perform different types of reading simultaneously, col. 8, lines 4-44.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include displaying a first and second graphical representation simultaneously because Gurne allows for different types of reading simultaneously and the technician may desire to view the time frame for a different procedure.

With respect to dependent claim 18, input means for receiving data representative of said performance measurement from a vehicle on board computer. (Gurne discloses a hand held unit which operates as a digital multi meter in which electrical readings, i.e. measurements, from a vehicle are input to the hand held unit for display, col. 7, lines 53-67)

With respect to dependent claim 19, port means for receiving programs for converting data received from said on board computer for display. (Gurne discloses ports for receiving expansion modules that allow the hand held to communicate with different devices and interpret, i.e. convert, the information, col. 11, lines 55 – col. 12, line12)

With respect to dependent claim 20, port receives a flash card. (Gurne discloses flashable memory, col. 6, lines 42-55)

As per independent 21, a method of displaying automotive service data . . . comprising the steps of: displaying a list of performance measurements, descriptions and values; (Gurne discloses a menu display providing options and function keys, col.

Art Unit: 2672

6, lines 34-40, see also figure 6) scrolling through said list of measurement descriptions and values; (Gurne discloses direction arrow keys to scroll the menu, col. 7, lines 9-10) selecting a measurement from said list; (Gurne discloses a system selection screen to select the vehicle diagnosis option, col. 7, lines 19-26) and displaying a graphical representation of said selected measurement over time. (Gurne discloses displaying graphical information dynamically, see figure 12, col. 16, lines 24-35)

However, it is noted that Gurne fails to disclose a first graphical representation and a second graphical representation by varying a time axis of the first graphical representation and displaying both simultaneously.

Gurne discloses a split window, with a digital multi mode and a suspended operation and allowing the technician to toggle between the operations and further allow the technician to perform different types of reading simultaneously, col. 8, lines 4-44.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include displaying a first and second graphical representation simultaneously because Gurne allows for different types of reading simultaneously and the technician may desire to view the time frame for a different procedure.

With respect to dependent claim 22, the selected data is an engine performance measurement. (Gurne discloses using the tool in vehicle controller systems such as the engine, col. 6, lines 25-27)

Application/Control Number: 09/944,108 Page 10

Art Unit: 2672

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is

Page 11

(703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Motilewa A. Good-Johnson Examiner

Art Unit 2672

mgj

January 16, 2004

MICHAEL RAZAVI

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600